

# **Vaccine Management**

Recommendations for  
Storage and Handling of  
Selected Biologicals

**November 2007**

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# **DT: Diphtheria, Tetanus Toxoids—Pediatric**

## **Td: Tetanus, Diphtheria Toxoids—Adult**

### **Shipping Requirements**

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

### **Condition upon Arrival**

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

### **Storage Requirements**

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

### **Shelf Life**

Check expiration date on vial or manufacturer-filled syringe.

### **Instructions for Use**

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

### **Shelf Life After Opening**

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Multi-dose Vials:** Withdraw single dose of vaccine into separate sterile needle and syringe for each immunization. The vaccine should be administered shortly after withdrawal from the vial. Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C) and used until expired, if not contaminated or unless otherwise stated in the manufacturer's product information.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

### **Special Instructions**

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

**DTaP: Diphtheria Toxoid, Tetanus Toxoid,  
Acellular Pertussis Vaccine—Pediatric**

**DTaP/Hib: Diphtheria Toxoid, Tetanus Toxoid,  
Acellular Pertussis Vaccine Combined with *Haemophilus  
influenzae* type b Conjugate Vaccine\* —Pediatric**

**DTaP/HepB/IPV: Diphtheria Toxoid, Tetanus Toxoid,  
Acellular Pertussis Vaccine, Hepatitis B Vaccine,  
Inactivated Polio Vaccine—Pediatric**

**Tdap: Tetanus Toxoid, Diphtheria Toxoid,  
Acellular Pertussis Vaccine—Adult**

**Shipping Requirements**

Should be shipped in insulated container.  
Maintain temperature at 35° – 46°F  
(2° – 8°C). **Do not freeze or expose to  
freezing temperatures.**

**Condition upon Arrival**

Should not have been frozen or exposed  
to freezing temperatures. Refrigerate  
upon arrival.

If you have questions about the condition  
of the material at the time of delivery,  
you should 1) immediately place material  
in recommended storage; and 2) then  
follow your state health department  
immunization program policy and contact  
either the Manufacturer's Quality Control  
office or the immunization program for  
guidance.

**Storage Requirements**

Refrigerate immediately upon arrival.  
Store at 35° – 46°F (2° – 8°C).  
**Do not freeze or expose to freezing  
temperatures.**

**Shelf Life**

Check expiration date on vial or  
manufacturer-filled syringe.

**Instructions for Reconstitution\*  
or Use**

Inspect visually for extraneous  
particulate matter and/or discoloration.  
If these conditions exist, the vaccine  
should not be used. Shake vial or  
manufacturer-filled syringe well before  
use. Discard vaccine if it cannot be  
resuspended with thorough agitation.

**Shelf Life After Reconstitution\*  
or Opening**

**Single-Dose Vials:** The vaccine should  
be administered shortly after withdrawal  
from the vial.

**Manufacturer-Filled Syringes:** The  
vaccine should be administered shortly  
after the needle is attached to the  
syringe.

**Special Instructions**

Rotate stock so that the earliest dated  
material is used first.

**Note:** All vaccine materials should be  
disposed of using medical waste  
disposal procedures. Contact the state  
health department for details.

\* DTaP/Hib (TriHIBit®) is ActHIB® (sanofi pasteur) reconstituted with Tripedia® (sanofi pasteur). Once reconstituted, this combination vaccine must be used within 30 minutes or discarded. The only DTaP vaccine that can be used to reconstitute ActHIB® is Tripedia®. No other brand of DTaP is approved for this use.

# **Hepatitis Vaccines:**

## **Hepatitis A, Hepatitis B, Hepatitis A/B, Hepatitis B/*Haemophilus influenzae* type b**

### **Shipping Requirements**

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

### **Condition upon Arrival**

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

### **Storage Requirements**

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

### **Shelf Life**

Check expiration date on vial or manufacturer-filled syringe.

### **Instructions for Use**

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

### **Shelf Life After Opening**

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

### **Special Instructions**

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# Hib: *Haemophilus influenzae* type b Conjugate Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

**Vaccine:** Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial.

## Instructions for Reconstitution\* or Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Reconstitution\* or Opening

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

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\* ActHIB® (sanofi pasteur) reconstituted with 0.4% sodium chloride diluent should be used within 24 hours after reconstitution. If sanofi pasteur DTaP-Tripedia® is used to reconstitute ActHIB®, the TriHibit® vaccine must be used within 30 minutes of reconstitution. Only sanofi pasteur DTaP-Tripedia® or the diluent shipped with the product may be used to reconstitute the sanofi pasteur ActHIB® product. No other brand of DTaP is licensed for use in reconstitution of ActHIB®.

# HPV: Human Papillomavirus Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C).

**Do not freeze or expose to freezing temperatures.**

Protect from light at all times.

## Shelf Life

Check expiration date on vial or manufacturer-filled syringe.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# IPV: Inactivated Polio Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C).

**Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial or manufacturer-filled syringe.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Multi-dose Vials:** Withdraw single dose of vaccine into separate sterile needle and syringe for each immunization. The vaccine should be administered shortly after withdrawal from the vial. Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C) and used until expired, if not contaminated or unless otherwise stated in the manufacturer's product information.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.



# TIV: Trivalent Inactivated Influenza Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

Protect Fluarix<sup>®</sup> and FluLaval<sup>™</sup> from light at all times by storing in original package.

## Shelf Life

Formulated for use during current influenza season. Check expiration date on vial or manufacturer-filled syringe.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Single-dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Multi-dose Vials:** Withdraw single dose of vaccine into separate sterile needle and syringe for each immunization. The vaccine should be administered shortly after withdrawal from the vial. Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C) and used until expired, if not contaminated or unless otherwise stated in the manufacturer's product information.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# LAIV: Live Attenuated Influenza Vaccine

## Shipping Requirements

Initially shipped to authorized distributors in the frozen state 5°F (-15°C). Shipped from the distributor to healthcare facilities in the refrigerated state at 35° – 46°F (2° – 8°C).

## Condition upon Arrival

Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.** (If LAIV is inadvertently frozen, the vaccine should be moved immediately to the refrigerator and may be used until the expiration date printed on the package.)

## Shelf Life

Formulated for use during current influenza season. Check expiration date on package.

## Instructions for Use

LAIV is a colorless to pale yellow liquid and is clear to slightly cloudy; some particulates may be present but do not affect the use of the product. After removal of the sprayer from the refrigerator, remove the rubber tip protector. Follow manufacturer's instructions to deliver 1/2 dose into one nostril. Then remove the dose-divider clip and deliver the remainder of the dose into the other nostril.

## Shelf Life After Opening

**Single-Dose Sprayer:** The vaccine should be administered shortly after removal from the refrigerator.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**NOTE:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# **MMR: Measles/Mumps/Rubella Vaccine, MR: Measles/Rubella Vaccine, Measles Virus Vaccine, Mumps Virus Vaccine, Rubella Virus Vaccine**

## **Shipping Requirements**

**Vaccine:** Should be shipped in insulated container. Must be shipped with refrigerant. Maintain temperature at 50°F (10°C) or less. If shipped with dry ice, diluent must be shipped separately.

**Diluent:** May be shipped with vaccine, but do not place in container with dry ice.

## **Condition upon Arrival**

Maintain at 50°F (10°C) or less. **Do not use warm vaccine.** Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## **Storage Requirements**

**Vaccine:** Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). Protect from light at all times, since such exposure may inactivate the vaccine viruses.

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

**Note:** MMR vaccine may be stored in the refrigerator or freezer.

## **Shelf Life**

Check expiration date on vial.

## **Instructions for Reconstitution and Use**

Reconstitute just before use according to the manufacturer's instructions. Use only the diluent supplied to reconstitute the vaccine.

## **Shelf Life After Reconstitution, Thawing, or Opening**

**Single-Dose Vials:** After reconstitution, use immediately or store at 35° – 46°F (2° – 8°C) and protect from light.

**Discard if not used within 8 hours of reconstitution.**

**Multi-dose vials:** Withdraw single dose of reconstituted vaccine into separate sterile needle and syringe for each immunization. The vaccine dose should be administered shortly after withdrawal from vial. Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C), but must be discarded if not used within 8 hours after reconstitution.

## **Special Instructions**

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# MMRV: Measles/Mumps/Rubella/Varicella Vaccine

## Shipping Requirements

**Vaccine:** Should be shipped in insulated container. Must be shipped with dry ice only, at 5°F (-15°C) or colder. Should be delivered within 2 days.

**Diluent:** May be shipped with vaccine, but do not place in container with dry ice.

## Condition upon Arrival

Should be frozen. Vaccine should remain at 5°F (-15°C) or colder until arrival at the healthcare facility. Dry ice should still be present in the shipping container when vaccine is delivered.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

**Vaccine:** Freeze immediately upon arrival. Maintain vaccine in a continuously frozen state at 5°F (-15°C) or colder. **No freeze/thaw cycles are allowed with this vaccine.** Vaccine should only be stored in freezers or refrigerator/freezers with separate external doors and compartments. Acceptable storage may be achieved in standard household freezers purchased in the last 10 years, and standard household refrigerator/freezers with a separate, sealed freezer compartment. "Dormitory-style units" are not appropriate for the storage of MMRV vaccine. **Do not store lyophilized vaccine in the refrigerator. If lyophilized vaccine is inadvertently stored in the refrigerator, it should be used within 72 hours. Lyophilized vaccine stored at 35° – 46°F (2° – 8°C) which is not used within 72 hours should be discarded.**

Protect the vaccine from light at all times since such exposure may inactivate the vaccine viruses.

In order to maintain temperatures of 5°F (-15°C) or colder, it will be necessary in most refrigerator/freezer models to adjust the temperature dial down to the coldest setting. This may result in the refrigerator compartment temperature being lowered as well. Careful monitoring of the refrigerator temperature will be necessary to avoid freezing killed or inactivated vaccines.

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial.

## Instructions for Reconstitution and Use

Reconstitute just before use according to the manufacturer's instructions. Use only the diluent supplied to reconstitute the vaccine.

## Shelf Life After Reconstitution, Thawing, or Opening

**Single-Dose Vials:** Discard reconstituted vaccine if it is not used **within 30 minutes** of reconstitution. **Do not freeze reconstituted vaccine.**

## Special Instructions

Rotate stock so that the earliest dated material is used first.

If this vaccine is stored at a temperature warmer than 5°F (-15°C), it will result in a loss of potency and a reduced shelf life. If a power outage or some other situation occurs that results in the vaccine storage temperature rising above the recommended temperature, the healthcare provider should contact Merck, the vaccine manufacturer, at 1-800-MERCK-90 for an evaluation of the product potency before using the vaccine.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# MCV: Meningococcal Conjugate Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.** Protect from light at all times.

## Shelf Life

Check expiration date on vial or manufacturer-filled syringe.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Single-dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Multi-dose Vials:** The vaccine should be administered shortly after the needle is attached to the syringe.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# MPSV: Meningococcal Polysaccharide Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

**Vaccine:** Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial or container.

## Instructions for Reconstitution and Use

Reconstitute just before using according to the manufacturer's instructions. Use only the diluent supplied to reconstitute the vaccine.

## Shelf Life After Reconstitution or Opening

**Single-Dose Vials:** Use within **30 minutes** of reconstitution.

**Multi-dose Vials:** Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C) and used up to 35 days after reconstitution.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.



# PCV: Pneumococcal Conjugate Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial or manufacturer-filled syringe.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Manufacturer-Filled Syringes:** The vaccine should be administered shortly after the needle is attached to the syringe.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# PPV: Pneumococcal Polysaccharide Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial.

## Instructions for Use

Inspect visually for extraneous particulate matter and/or discoloration. If these conditions exist, the vaccine should not be used. Shake vial or manufacturer-filled syringe well before use. Discard vaccine if it cannot be resuspended with thorough agitation.

## Shelf Life After Opening

**Single-Dose Vials:** The vaccine should be administered shortly after withdrawal from the vial.

**Multi-dose Vials:** Withdraw single dose of vaccine into separate sterile needle and syringe for each immunization. The vaccine should be administered shortly after withdrawal from the vial. Unused portions of multi-dose vials may be refrigerated at 35° – 46°F (2° – 8°C) and used until expired, if not contaminated or unless otherwise stated in the manufacturer's product information.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.



# Rotavirus Vaccine

## Shipping Requirements

Should be shipped in insulated container. Maintain temperature at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.**

## Condition upon Arrival

Should not have been frozen or exposed to freezing temperatures. Refrigerate upon arrival.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

Refrigerate immediately upon arrival. Store at 35° – 46°F (2° – 8°C). **Do not freeze or expose to freezing temperatures.** Protect from light at all times, since such exposure may inactivate the vaccine viruses.

## Shelf Life

Check expiration date on package.

## Instructions for Use

Each dose is supplied in a container consisting of a squeezable plastic, latex-free dosing tube with a twist-off cap, allowing for direct oral administration. The dosing tube is contained in a pouch. Remove the dosing tube from the pouch, screw the cap clockwise to puncture the tube, and screw the cap off counter-clockwise so that the liquid can be squeezed from the tube during oral administration of the vaccine.

## Shelf Life After Opening

**Pouched Single-Dose Tubes:** The vaccine should be administered shortly after withdrawal from the refrigerator. The dosing tube should not be returned to the refrigerator once the screw cap has been removed.

## Special Instructions

Rotate stock so that the earliest dated material is used first.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# Varicella (Chickenpox) Vaccine

## Shipping Requirements

**Vaccine:** Should be shipped in insulated container. Must be shipped with dry ice only, at 5°F (-15°C) or colder. Should be delivered within 2 days.

**Diluent:** May be shipped with vaccine, but do not place in container with dry ice.

## Condition upon Arrival

Should be frozen. Vaccine should remain at 5°F (-15°C) or colder until arrival at the healthcare facility. Dry ice should still be present in the shipping container when vaccine is delivered.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

**Vaccine:** Freeze immediately upon arrival. Maintain vaccine in a continuously frozen state at 5°F (-15°C) or colder. **No freeze/thaw cycles are allowed with this vaccine.** Vaccine should only be stored in freezers or refrigerator/freezers with separate external doors and compartments. Acceptable storage may be achieved in standard household freezers purchased in the last 10 years, and standard household refrigerator/freezers with a separate, sealed freezer compartment. "Dormitory-style units" are not appropriate for the storage of varicella vaccine. **Do not store lyophilized vaccine in the refrigerator. If lyophilized vaccine is inadvertently stored in the refrigerator, it should be used within 72 hours. Lyophilized vaccine stored at 35° – 46°F (2° – 8°C) which is not used within 72 hours, should be discarded.**

Protect the vaccine from light at all times since such exposure may inactivate the vaccine virus.

In order to maintain temperatures of 5°F (-15°C) or colder, it will be necessary in most refrigerator/freezer models to turn the temperature dial down to the coldest setting. This may result in the refrigerator compartment temperature being lowered as well. Careful monitoring of the refrigerator temperature will be necessary to avoid freezing killed or inactivated vaccines.

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial.

## Instructions for Reconstitution and Use

Reconstitute just before use according to the manufacturer's instructions. Use only the diluent supplied to reconstitute the vaccine.

## Shelf Life After Reconstitution, Thawing, or Opening

**Single-Dose Vials:** Discard reconstituted vaccine if it is not used **within 30 minutes** of reconstitution. **Do not freeze reconstituted vaccine.**

## Special Instructions

Rotate stock so that the earliest dated material is used first.

If this vaccine is stored at a temperature warmer than 5°F (-15°C), it will result in a loss of potency and a reduced shelf life. If a power outage or some other situation occurs that results in the vaccine storage temperature rising above the recommended temperature, the healthcare provider should contact Merck, the vaccine manufacturer, at 1-800-9-VARIVAX for an evaluation of the product potency before using the vaccine.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

# Zoster (Shingles) Vaccine

## Shipping Requirements

**Vaccine:** Should be shipped in insulated container. Must be shipped with dry ice only, at 5°F (-15°C) or colder. Should be delivered within 2 days.

**Diluent:** May be shipped with vaccine, but do not place in container with dry ice.

## Condition upon Arrival

Should be frozen. Vaccine should remain at 5°F (-15°C) or colder until arrival at the healthcare facility. Dry ice should still be present in the shipping container when vaccine is delivered.

If you have questions about the condition of the material at the time of delivery, you should 1) immediately place material in recommended storage; and 2) then follow your state health department immunization program policy and contact either the Manufacturer's Quality Control office or the immunization program for guidance.

## Storage Requirements

**Vaccine:** Freeze immediately upon arrival. Maintain vaccine in a continuously frozen state at 5°F (-15°C) or colder. **No freeze/thaw cycles are allowed with this vaccine.** Vaccine should only be stored in freezers or refrigerator/freezers with separate external doors and compartments. Acceptable storage may be achieved in standard household freezers purchased in the last 10 years, and standard household refrigerator/freezers with a separate, sealed freezer compartment. "Dormitory-style units" are not appropriate for the storage of zoster vaccine. **Do not store lyophilized vaccine in the refrigerator.** Protect the vaccine from light at all times since such exposure may inactivate the vaccine virus.

In order to maintain temperatures of 5°F (-15°C) or colder, it will be necessary in most refrigerator/freezer models to turn

the temperature dial down to the coldest setting. This may result in the refrigerator compartment temperature being lowered as well. Careful monitoring of the refrigerator temperature will be necessary to avoid freezing killed or inactivated vaccines.

**Diluent:** May be refrigerated or stored at room temperature (68° – 77°F [20° – 25°C]). **Do not freeze or expose to freezing temperatures.**

## Shelf Life

Check expiration date on vial.

## Instructions for Reconstitution and Use

Reconstitute just before use according to the manufacturer's instructions. Use only the diluent supplied to reconstitute the vaccine.

## Shelf Life After Reconstitution, Thawing, or Opening

**Single-Dose Vials:** Discard reconstituted vaccine if it is not used **within 30 minutes** of reconstitution. **Do not freeze reconstituted vaccine.**

## Special Instructions

Rotate stock so that the earliest dated material is used first.

If this vaccine is stored at a temperature warmer than 5°F (-15°C), it will result in a loss of potency and a reduced shelf life. If a power outage or some other situation occurs that results in the vaccine storage temperature rising above the recommended temperature, the healthcare provider should contact Merck, the vaccine manufacturer, at 1-800-MERCK-90 for an evaluation of the product potency before using the vaccine.

**Note:** All vaccine materials should be disposed of using medical waste disposal procedures. Contact the state health department for details.

| <b>Manufacturer/Distributor</b>  | <b>Telephone Number</b>  | <b>Products</b>  |
|--|--|--|
| <b>sanofi pasteur</b><br><a href="http://www.sanofipasteur.us">www.sanofipasteur.us</a>  | <b>800-822-2463</b>  | <b>DTaP, DTaP-Hib, DT, Td, Tdap, TT, Hib, Influenza (TIV), IPV, MCV4, MPSV4</b>                                |
| <b>Talecris Biotherapeutics</b><br><a href="http://www.talecrisusa.com/">www.talecrisusa.com/</a>  | <b>800-520-2807</b>  | <b>HBIG, IGIM, RIG, TIG</b>  |
| <b>Centers for Disease Control &amp; Prevention Drug Service</b><br><a href="http://www.cdc.gov/ncidod/srp/drugs/drug-service.html">www.cdc.gov/ncidod/srp/drugs/drug-service.html</a> | <b>404-639-3670</b>  | <b>Distributor for Diphtheria antitoxin</b>  |
| <b>Novartis</b><br><a href="http://www.novartis-vaccines.com/products/index.shtml">www.novartis-vaccines.com/products/index.shtml</a>  | <b>800-244-7668</b>  | <b>Influenza (TIV)</b>   |
| <b>GlaxoSmithKline</b><br><a href="http://www.gsk.com/">www.gsk.com/</a>   | <b>866-475-8222</b><br>(customer support)<br><b>888-825-5249</b><br>(customer support) | <b>DTaP, DTaP-HepB-IPV, Tdap, HepA, HepB, HepA-HepB, Influenza (TIV)</b>                                       |
| <b>Massachusetts Biological Labs</b>   | <b>617-474-3000</b><br><b>617-983-6400</b>   | <b>Td, IGIM, TT</b>  |
| <b>MedImmune, Inc.</b><br><a href="http://www.medimmune.com">www.medimmune.com</a>   | <b>877-358-6478</b>  | <b>Influenza (LAIV)</b>  |
| <b>Merck</b><br><a href="http://www.merckvaccines.com">www.merckvaccines.com</a>   | <b>800-637-2590</b>  | <b>Hib, Hib-HepB, HepA, HepB, HPV, Measles, Mumps, Rubella, MMR, MMRV, PPV23, Rotavirus, Varicella, Zoster</b> |
| <b>Nabi Biopharmaceuticals</b><br><a href="http://www.nabi.com">www.nabi.com</a>   | <b>800-635-1766</b>  | <b>HBIG</b>  |
| <b>Wyeth</b><br><a href="http://www.wyeth.com">www.wyeth.com</a>   | <b>800-999-9384</b>  | <b>Hib, PCV7</b>   |

September 2007

## Texas Health Service Regions

### Health Service Region 1

Immunization Program  
Mail Code 1899  
1109 Kemper  
Lubbock, Texas 79403  
(806) 744-3577

### Health Service Region 7

Immunization Program  
Mail Code 1902  
2408 S. 37th St.  
Temple, Texas 76504-7168  
(254) 778-6744

### Health Service Regions 2 & 3

Immunization Program  
Mail Code 1905  
1301 S. Bowen Rd., Ste. 200  
Arlington, Texas 76013-2262  
(817) 264-4793

### Health Service Region 8

Immunization Program  
2201 E. Main, Ste. A  
Uvalde, Texas 78801  
(830) 278-7151 Ext. 438

### Health Service Regions 4 & 5 North

Immunization Program  
Mail Code 1901  
1517 W. Front St.  
Tyler, Texas 75702  
(903) 533-5368

### Health Service Regions 9 & 10

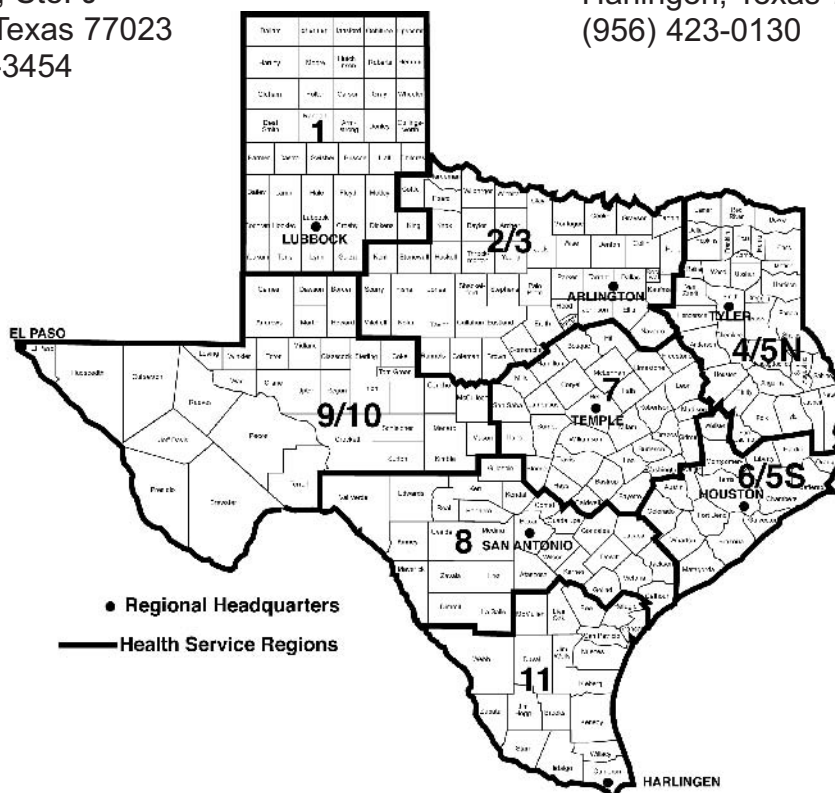
Immunization Program  
2301 N. Big Spring, Ste. 300  
Midland, Texas 79705-7649  
(432) 683-9492

### Health Service Regions 6 & 5 South

Immunization Program  
Mail Code 1906  
5425 Polk, Ste. J  
Houston, Texas 77023  
(713) 767-3454

### Health Service Region 11

Immunization Program  
Mail Code 1907  
601 W. Sesame Dr.  
Harlingen, Texas 78550  
(956) 423-0130



[www.dshs.state.tx.us/regions/default.shtm](http://www.dshs.state.tx.us/regions/default.shtm)



Adapted from:

- Department of Health and Human Services. Centers for Disease Control and Prevention. Vaccine Management: Recommendations for Storage and Handling of Selected Biologicals, November 2007. [www.cdc.gov/nip/vaccines/pubs/downloads/bk-vac-mgt.pdf](http://www.cdc.gov/nip/vaccines/pubs/downloads/bk-vac-mgt.pdf) (accessed January 2008).